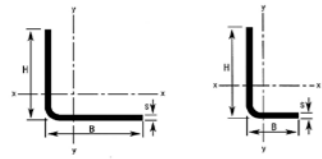


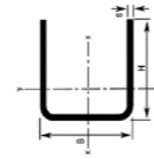
Cold formed profiles

The profiles are manufactured according to EN 10162 in quality S235J2G3C from unpickled strip. Additional dimensions and special designs can be offered on request.



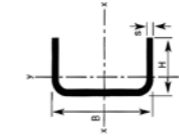
L-profile

Dimension H x B x s	Weight kg/m	I_x cm ⁴	W_x cm ³	I_y cm ⁴	W_y cm ³
15 x 15 x 2,0	0,42	0,11	0,11	0,11	0,11
20 x 20 x 2,0	0,58	0,28	0,20	0,28	0,20
25 x 25 x 2,0	0,74	0,57	0,32	0,57	0,32
30 x 30 x 2,0	0,89	1,01	0,47	1,01	0,47
30 x 30 x 3,0	1,30	1,43	0,68	1,43	0,68
40 x 40 x 2,0	1,20	2,45	0,84	2,45	0,84
40 x 40 x 3,0	1,77	3,54	1,23	3,54	1,23
40 x 40 x 4,0	2,31	4,52	1,60	4,52	1,60
45 x 45 x 4,0	2,63	6,56	2,05	6,56	2,05
50 x 50 x 3,0	2,24	7,08	1,96	7,08	1,96
50 x 50 x 4,0	2,94	9,13	2,55	9,13	2,55
60 x 60 x 3,0	2,72	12,44	2,85	12,44	2,85
70 x 70 x 5,0	5,15	31,62	6,32	31,62	6,32
75 x 75 x 4,0	4,50	32,10	5,92	32,10	5,92
80 x 80 x 5,0	5,90	47,93	8,34	47,93	8,34
30 x 20 x 2,0	0,74	0,87	0,44	0,32	0,21
40 x 20 x 2,0	0,89	1,92	0,75	0,35	0,22
50 x 30 x 3,0	1,77	5,93	1,80	1,67	0,72
60 x 30 x 3,0	2,01	9,78	2,54	1,72	0,72
60 x 40 x 3,0	2,22	10,78	2,68	3,98	1,30
100 x 50 x 4,0	4,50	61,19	9,53	11,09	2,78
125 x 65 x 5,0	7,10	151,55	18,74	30,31	5,87
150 x 50 x 5,0	7,60	224,00	24,96	14,50	3,52



U-profile

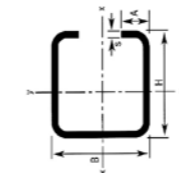
Dimension H x B x S x s	Weight kg/m	I_x cm ⁴	W_x cm ³	I_y cm ⁴	W_y cm ³
16 x 16 x 16 x 2.0	0.63	0.32	0.39	0.21	0.22
20 x 20 x 20 x 2.0	0.84	0.68	0.68	0.43	0.35
25 x 25 x 25 x 2.0	1.10	1.42	1.13	0.88	0.56
30 x 30 x 30 x 2.0	1.34	2.56	1.71	1.57	0.83
30 x 30 x 30 x 3.0	1.90	3.40	2.27	2.16	1.19
35 x 35 x 35 x 2.0	1.57	4.19	2.39	2.54	1.14
35 x 35 x 35 x 3.0	2.25	5.78	3.24	3.61	1.65
40 x 40 x 40 x 2.0	1.81	6.40	3.20	3.83	1.50
40 x 40 x 40 x 3.0	2.59	8.93	4.46	5.51	2.19
50 x 50 x 50 x 3.0	3.31	18.26	7.31	11.09	3.48
50 x 50 x 50 x 4.0	4.31	22.79	9.12	14.14	4.52
60 x 60 x 60 x 3.0	4.02	32.20	10.73	19.56	5.10



Unequal U-profile

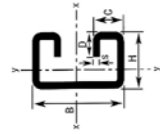
Dimension H x B x S x s	Weight kg/m	I_x cm ⁴	W_x cm ³	I_y cm ⁴	W_y cm ³
20 x 30 x 20 x 2,0	1,02	1,77	1,18	0,51	0,38
20 x 40 x 20 x 2,0	1,13	3,47	1,74	0,56	0,40
20 x 50 x 20 x 3,0	1,85	8,08	3,23	0,84	0,59
30 x 40 x 30 x 3,0	2,12	6,72	3,36	2,47	1,26
70 x 40 x 70 x 3,0	4,00	15,70	7,55	25,76	6,26
20 x 50 x 20 x 3,0	1,85	8,08	3,23	0,84	0,59
20 x 50 x 20 x 4,0	2,35	9,31	3,72	1,00	0,74
25 x 50 x 25 x 3,0	2,12	9,73	3,89	1,61	0,92
30 x 50 x 30 x 2,5	2,00	9,88	3,95	2,29	1,11
35 x 50 x 35 x 3,0	2,55	13,06	5,22	4,09	1,77
40 x 50 x 40 x 3,0	2,82	14,95	5,98	6,00	2,28
30 x 60 x 30 x 3,0	2,60	17,91	5,97	2,87	1,35
30 x 60 x 30 x 4,0	3,40	21,78	7,26	3,61	1,74
40 x 60 x 40 x 3,0	3,08	22,79	7,60	6,41	2,36
40 x 70 x 40 x 3,0	3,26	32,14	9,18	6,72	2,42
50 x 70 x 50 x 4,0	4,93	49,73	14,22	16,10	4,81
40 x 80 x 40 x 3,0	3,55	44,53	11,13	7,08	2,47
40 x 80 x 40 x 5,0	5,59	65,76	16,44	10,74	3,91
30 x 100 x 30 x 3,0	3,50	6030	12,06	3,33	1,45

Dimension H x B x S x s	Weight kg/m	I_x cm ⁴	W_x cm ³	I_y cm ⁴	W_y cm ³
50 x 100 x 50 x 3,0	4,49	89,48	17,90	14,17	3,91
50 x 100 x 50 x 4,0	5,88	110,14	22,03	18,25	5,11
50 x 100 x 50 x 5,0	7,21	132,85	26,57	21,64	6,26
40 x 120 x 40 x 4,0	5,97	147,29	24,55	10,37	3,40
60 x 120 x 60 x 4,0	7,15	201,14	33,52	32,60	7,48
60 x 120 x 60 x 6,0	10,38	275,47	45,91	44,87	10,68
60 x 140 x 60 x 4,0	7,80	298,60	42,66	34,18	7,64
60 x 140 x 60 x 5,0	9,57	344,40	49,20	41,27	9,37
60 x 140 x 60 x 6,0	11,32	409,96	58,14	47,78	10,99
70 x 140 x 70 x 4,0	8,30	325,84	46,55	51,85	10,27
70 x 140 x 70 x 5,0	10,40	390,35	56,48	63,23	12,65
60 x 160 x 60 x 5,0	10,40	481,09	60,14	42,76	9,55
60 x 160 x 60 x 6,0	12,26	561,17	70,15	49,80	11,18
70 x 160 x 70 x 6,0	13,10	631,70	78,96	77,38	15,29
70 x 180 x 70 x 6,0	14,00	839,69	92,97	80,27	15,45
60 x 200 x 60 x 6,0	14,00	964,77	96,48	53,28	11,58
70 x 200 x 70 x 6,0	14,90	1077,72	107,77	82,84	15,69
80 x 200 x 80 x 6,0	15,90	1173,50	117,35	120,07	20,22
75 x 250 x 75 x 6,0	17,80	1943,00	155,44	107,27	18,43



C-profile

Dimension A x H x B x H x A x s	Weight kg/m	I_x cm ⁴	W_x cm ³	I_y cm ⁴	W_y cm ³
HR 41-10 8.0 x 15 x 28 x 15 x 8.0 x 2.0	0.97	1.44	1.03	0.40	0.46
HR 41-15 8.5 x 19 x 34 x 19 x 8.5 x 2.0	1.18	2.75	1.63	0.77	0.67
HR 41-19 7.0 x 25 x 25 x 25 x 7.0 x 2.0	1.19	1.61	1.29	1.30	0.93
HR 41-24 10.0 x 30 x 30 x 30 x 10.0 x 2.0	1.54	2.92	1.95	2.50	1.52
HR 41-25 14.0 x 30 x 50 x 30 x 14.0 x 3.0	2.76	9.02	3.61	2.78	1.50
HR 41-42 10.0 x 40 x 50 x 40 x 10.0 x 3.0	3.04	16.86	6.74	8.50	3.54
HR 41-45 15.0 x 50 x 100 x 50 x 15.0 x 3.0	4.95	103.54	20.71	22.11	6.79



Anchor profile

Dimension D x C x H x B x H x C x D x s	Weight kg/m	I _x cm ⁴	W _x cm ³	I _y cm ⁴	W _y cm ³
HR 46 -30 6 x 11 x 22 x 40 x 22 x 11 x 6 x 2	1.57	4.82	2.41	1.31	1.02
HR 46 -32 6 x 13 x 26 x 48 x 26 x 13 x 6 x 2	1.86	1.86	3.50	2.40	1.60
HR 46 -35 8 x 14 x 30 x 50 x 30 x 14 x 8 x 3	2.99	2.99	5.73	5.10	3.07

Mechanical characteristics

Steel quality in accordance with EN	Yield strength R _{eH} MPa min. mm ²	Tensile strength R _m MPa	Extension A ₅ min.%
S235J2G3C	235	360-440	25

Cold formed profiles or hot-rolled UNP beam?

The table below compares three UNP beams with alternative cold formed U-profiles. As can be seen in the table, a considerable saving in weight can be achieved by replacing UNP beams with cold formed U-profiles.

Dimension	Weight kg/m	I _x cm ⁴	W _x cm ³	I _y cm ⁴	W _y cm ³
UNP 3 33 x 30 x 33 x 5.7	4.27	6.39	4.26	5.33	2.68
U-profile 45 x 45 x 45 x 3	2.94	13.41	5.96	8.16	2.83
UNP 5 38 x 50 x 38 x 5-7	5.59	26.40	10.60	9.12	3.75
U-profile 50 x 70 x 50 x 3	3.76	40.24	11.50	12.74	3.73
UNP 10 50 x 100 x 50 x 6-8.5	10.60	206.00	41.20	29.30	8.49
U-profile 60 x 120 x 60 x 5	8.83	253.96	42.33	39.85	9.23

Cold formed profiles

Special profiles

In addition to standard profiles, we can also supply profiles in accordance with your wishes; special profiles. Heléns adapts special profiles according to your needs. Our possibilities are almost limitless and you do not need to adapt to suit a standard. You can have a product that is so fully processed that it can be put straight into production.

Examples of materials used for profile manufacture

- Hot rolled strip
- Cold rolled strip
- Hot dip galvanized
- Electro-galvanized
- Painted
- Foil coated
- Stainless
- Aluminium

Heléns can supply profiles in the majority of qualities available on the market. We are even experienced in supplying ultra-high tensile steel with an upper yield point of up to 1200 N/mm².

Examples of additional processing of special profiles

- Laser cutting
- Bending (also 3D)
- Piercing/Punching
- Embossing
- Hot dip galvanizing
- Laser welding

Special profiles	Open profiles	Welded profiles
Profile height	max. approx. 300 mm	max. approx. 200 mm
Wall thickness	0.3 - 12.5 mm	1.0 - 7.0 mm
Max. length	24000 mm	24000 mm
Min. quantity	approx. 3000 m	approx. 5000 m